Compu-DAWN, Inc.

Data
Access &
Wireless
Network

compu ⚡ **DAWN**

Compu-DAWN

Software Solutions
for Public Safety.

A Fully Integrated
Information Management System.

compu DAWN

Our Mission

■ To be the premier provider of Software Solutions and Communications Technology for Public Safety.
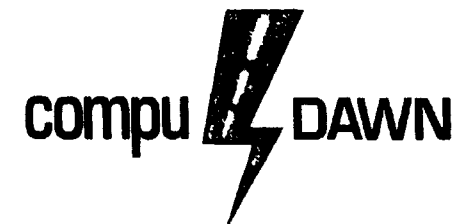
◆ Law Enforcement
◆ Fire
◆ EMS

compu DAWN

The U.S. Market

- The U.S. Market 21,860 police departments
- 35,690 fire departments
- All EMS and other public safety agencies

Fewer than 20% are computerized

compu DAWN

High Tech Cops

Bringing the resources of headquarters to patrol cars

Computer and Software Technology

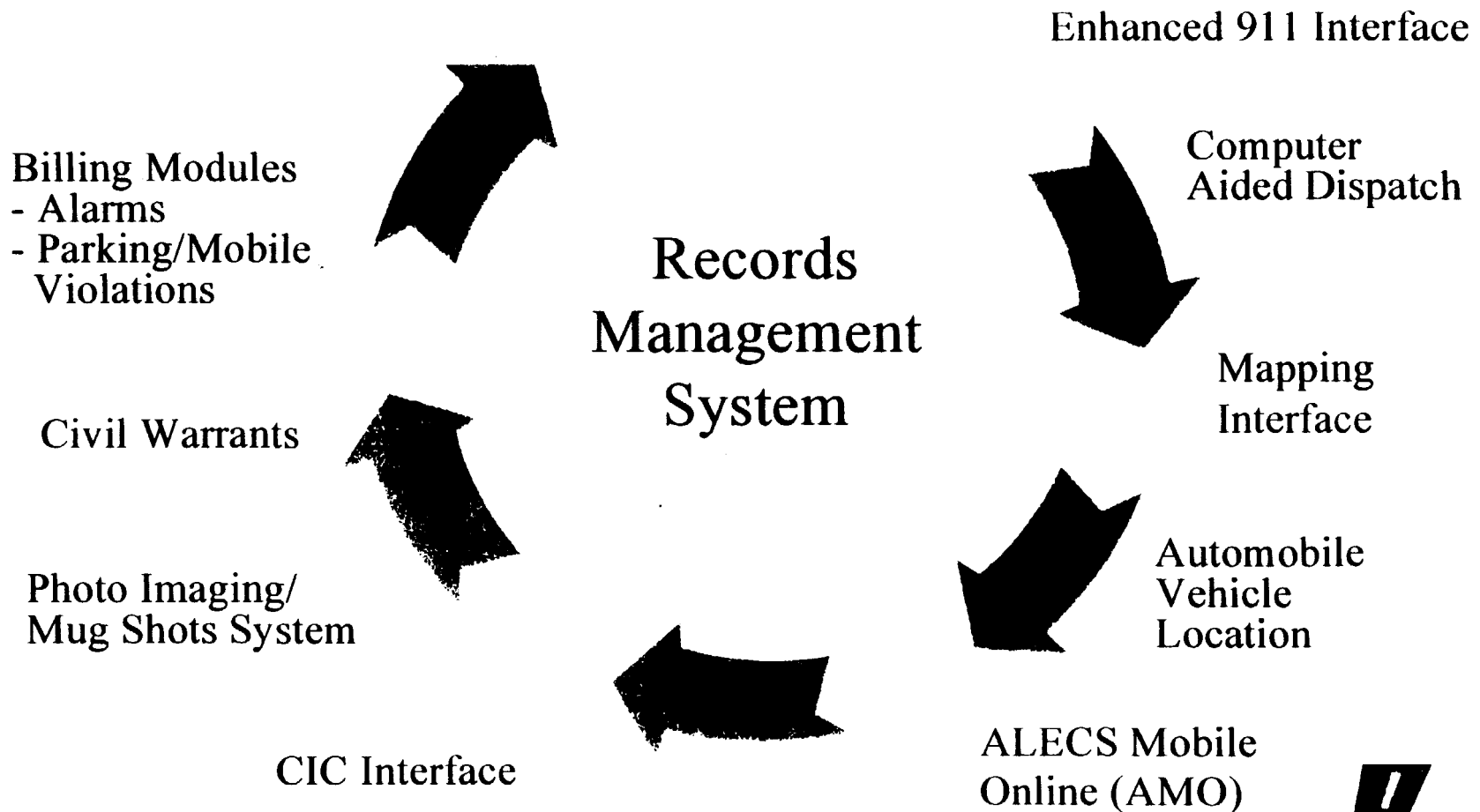\+   Wireless Communication

\=   **Reduced Crime**

Source: Mobile Officer - July 1995

compu DAWN

ALECS 2000 Modules

Enhanced 911 Interface

Billing Modules
- Alarms
- Parking/Mobile
  Violations

Computer
Aided Dispatch

Records
Management
System

Civil Warrants

Mapping
Interface

Photo Imaging/
Mug Shots System

Automobile
Vehicle
Location

CIC Interface

ALECS Mobile
Online (AMO)
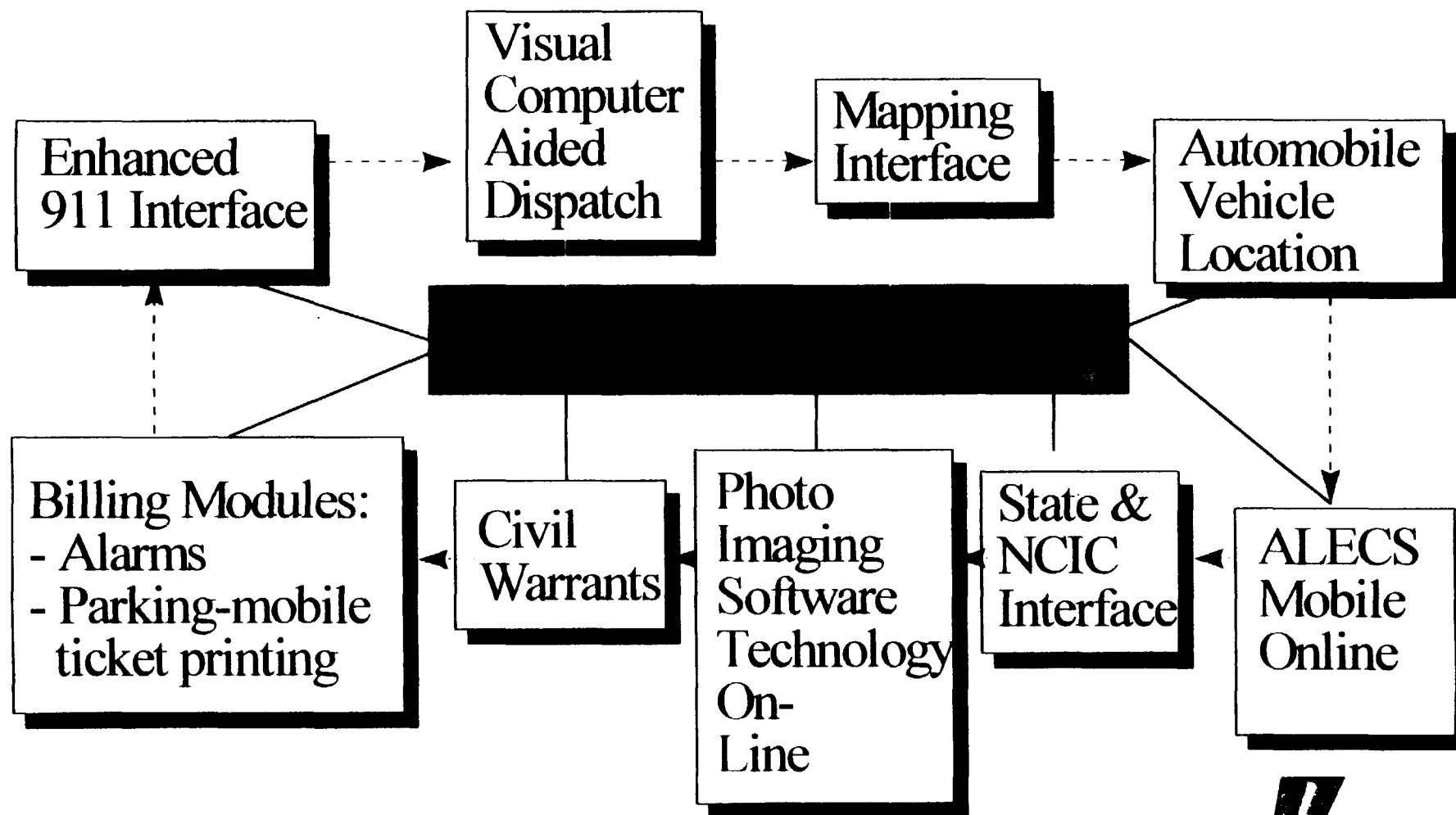
compu DAWN

ALECS 2000TM Modules

ALECS 2000TM

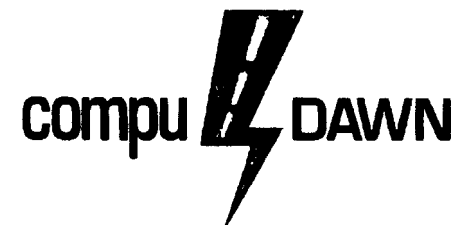Advanced Law Enforcement Computer Solutions

- ■ State-of-the-art software solutions designed for public safety

- ■ 14+ modules

- ■ All modules interface with existing systems.

- ■ Modules can be combined to form fully integrated solutions.

compu **DAWN**
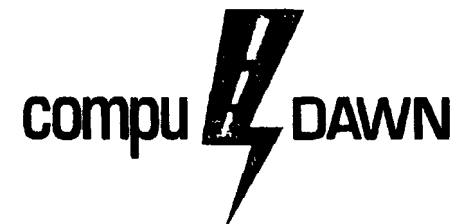
ARMS

Advanced Records Management System

- Organizes, processes and retrieves data in *real-time*.

- Provides information to field personnel so they can make informed decisions and quick responses.

- Information includes: person's history, location history, warrants, hazards, firearm permits, orders of protection, alarm/emergency contacts, property registration, etc.
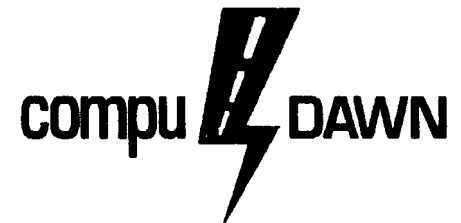
compu DAWN

E-911 Interface

■ Imports caller's name, number and location data from the telephone company.

■ Retrieves any historical information on the caller or the location.

■ Increased accuracy, decreased key strokes, decreased response time and increased safety.

compu DAWN

VCAD

Visual **C**omputer **A**ided **D**ispatch

- Identifies available units.
- Assists the dispatcher in assigning resources promptly.
- Obtains information from database.
- Provides the nearest cross streets, hydrant locations, etc.
- Date/time/event numbers automatically stamped.
- Checks hazard, warrant, firearm permit, alarm, order of protection and history from databases.
- Gives call back number.
- Touch screen, full color and user friendly.

compu *🗲* **DAWN**

V-CAD
Visual Computer Aided Dispatch

File Options Help

FR01 AVAL 13:56	FR02 AVAL 13:55	FR03 AVAL 13:55	EMS1 AVAL 13:55	101 AVAL 02:19	102 AVAL 21:40	103 AVAL 19:41	104 AVAL 13:55	201 AVAL 13:55

202 AVAL 13:55	203 AVAL 13:55

FR01 DNAK 23:41	FR01 DISP 22:15	102 ARRI 02:08

102 DNAK 01:41	102 DNAK 20:24	103 RESP 01:28

Unit	Status	Elps Time	Priority	Type	Event #	
FR01	DISP	22:15	5	DISTURBANCE\HOU	96-000401	COAS
102	DNAK	20:24	1	ROBBERY\	97-000017	FLOW
FR01	DNAK	23:41	1	ROBBERY\	97-000017	FLOW
203	DNAK	20:47	5	DISTURBANCE\HOU	96-000401	COAS
102	ARRI	02:08	5	DISTURBANCE\HOU	96-000401	COAS
ENG1	STAR	02:41	5	DISTURBANCE\FBI	96-000403	
AMB1	LVHS	02.40	5	DISTURBANCE\HOU	96-000401	COAS

Units

102 DNAK 01:41	ENG1 STAR 02:41

Event #	Elps Time	Priority	Type	Location	
96-000404	01 11	1	ASSAULT\	COASTAL COMPUTER SY	
97-000015	21 42	1	BURGLARY\		

Selected Event#
96-000403

Label1

Command

VCAD

Visual Computer Aided Dispatch

Comp DAWN VCAD System 2

Tools

K101 AVAL 13:28   K102 AVAL 13:28

K103 AVAL 13:28

11 AVAL 13:28   13 AVAL 13:28
17 AVAL 13:28   26 AVAL 13:28

31 AVAL 13:28   32 AVAL 13:28
33 AVAL 13:28   3161 AVAL 13:28

12 AVAL 13:28   13 AVAL 13:28
50 AVAL 13:28

NEW NEW

| Evnt # | Date: 11/18/96 | Time: 1328 | How Received: E911 |
| Location: TOM'S BAKERY | | | Cross Street: |

Address: 44   Street: FIRST STREET   Apt Number: Post

City, Town, Village: CARMEL   Agency: CARM   Plate #   State:

Event Type for Police: E911   Priority: 1
Desc. For Police Type:

☐ Police
☐ Fire
☐ EMS

Name: JOEL SMITH   Role: CALLER
Address: 44   Street: FIRST STREET   Apt #   AC: 914   Phone: 432-7096
City, Town, Village: CARMEL   State: NY
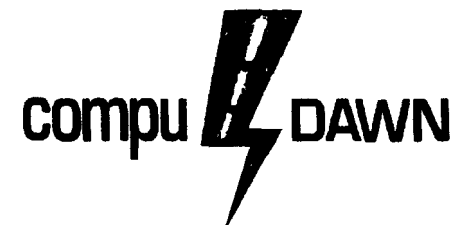
PrePlan / Units / Warnings / Notes / History / GeoInfo

File   Hold   E911_1

Cancel   Mail   Pv   E911_2

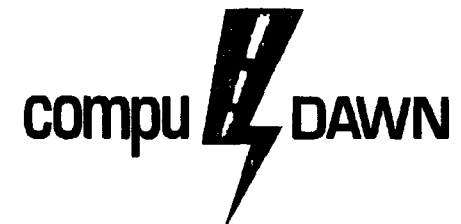Command

Mapping Interface

- VCAD automatically displays location of event and available units.

- Provides quicker and more effective resource deployment.

- The dispatcher can *zOOM* the map to give greater details to responding units.

- Locations of various past events can be displayed providing crime analysis.
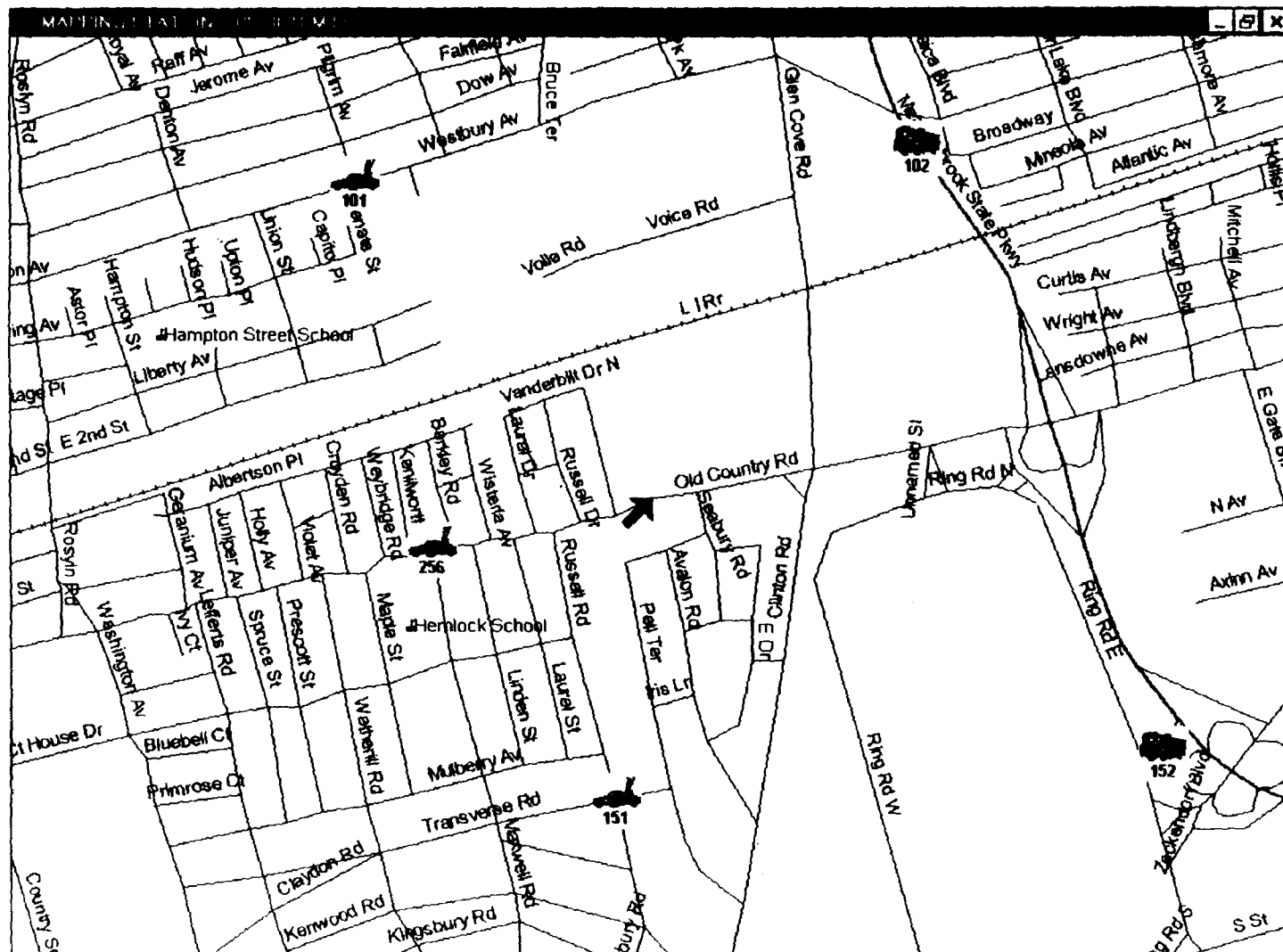
compu DAWN

AVL

Automatic Vehicle Location

- Automatically transmits location of vehicles and event to headquarters where they are tracked visually.
- Gives management and dispatchers easy visual representation.
- Provides real-time response of vehicles to an event.
- Increases officer safety and productivity.
- Provides management with enhanced supervisory capabilities.

compu DAWN

AVL - Mapping

Automatic Vehicle Location

AMO

ALECS Mobile On-line

A Virtual Office in the Car

- All files can be accessed and updated mobile.

- Messages and replies are transmitted as data; provides security and privacy.

- Text to speech and voice recognition commands.

- Photo imaging/mug shot of persons can be transmitted individually or broadcast for rapid distribution.

- DMV, state accident and incident reports can be completed and filed from the field.

- Increased officer safety and time in the field.

compu DAWN

Local, State & NCIC Interface

- Interface to crime information databases from all workstations.
- Users are provided menu options for various inquiries: driver's information, criminal history, etc.
- Delivers responses to an AMO laptop, no need for dispatcher intervention, thus providing faster response to in-field requests.
- Frees dispatcher's time, while simultaneously giving Police Officer important information.
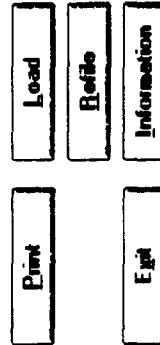- Increases traffic summonses and arrests.

compu DAWN

PISTOL

Photo Imaging Software Technology On-Line

- Enables capturing images of prisoners, property, accident and crime scenes, etc. and links them instantly to the ALECS database.

- Utilizing AMO, photos can be transmitted to the laptop computer for identification, searches, etc.

- Photos relating to a specific event can be linked, retrieved, or printed on demand, with field notes attached.

- Searches for match and physical characteristics.

- Automatic photo arrays.

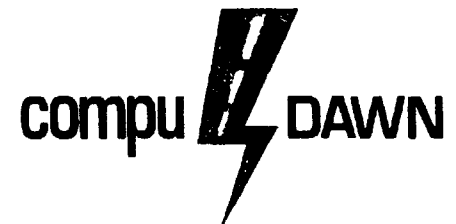- Decreases crime/impersonation and false I.D. utilization.

compu**⚡**DAWN

PISTOL

Photo Imaging Software Technology On-Line

View Lineup

Date: 01/10/97   Time: 1644

Location: COMPUDAWN POLICE

General Line Up # : 51

Case #   96-0001

LineUp # in the case

7

Comments

Print   Load

Exit   Refile

Information

Civil Warrants

- Fully integrated with ARMS™.

- Provides listing of warrants by name or number.

- Alerts officer if a person has an outstanding warrant.

- Provides accuracy and saves time resulting in increased revenues.

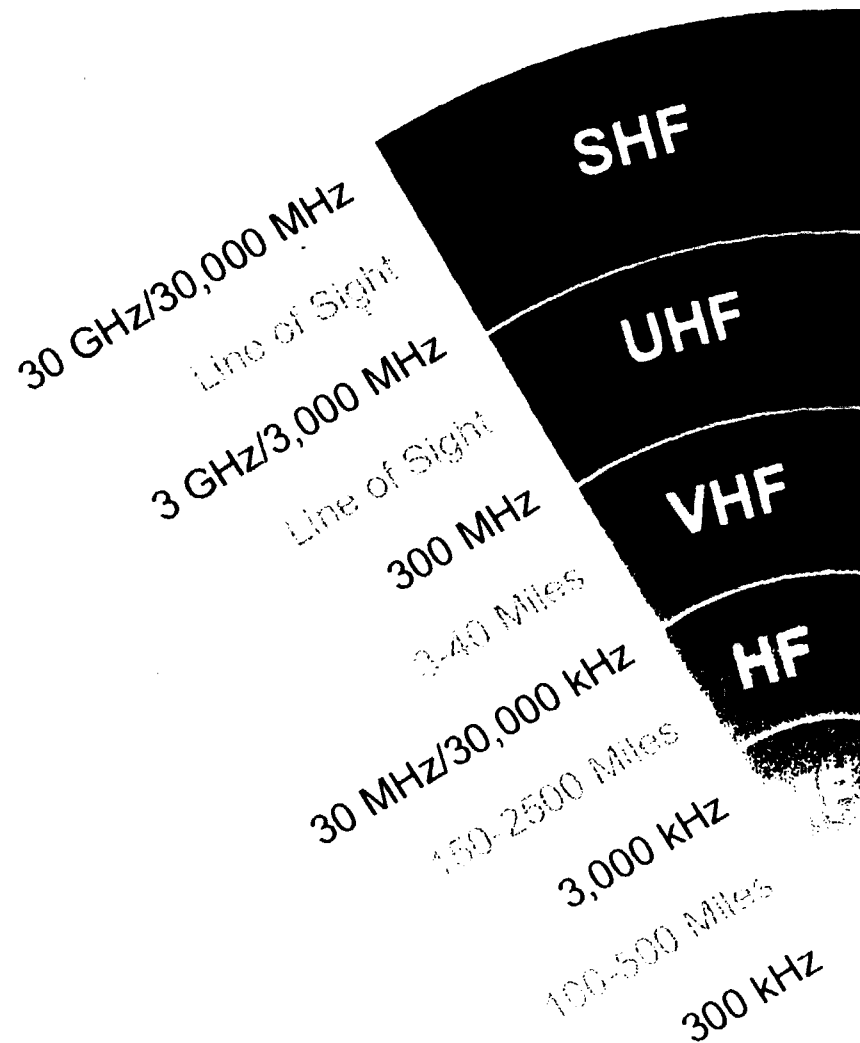**compu DAWN**

Billing Modules

False Alarm

- Automates the billing process for false alarms.

Parking/Traffic Violations

- Integrated with the persons file by name and license number.
- Payments and balances are maintained.
- Dunning and scofflaw letters are created.
- Information can be transmitted to the state DMV.
- Increases efficiency and revenue for municipality.

compu DAWN

Typical Users of the Spectrum

SHF

UHF

VHF

HF

30 GHz/30,000 MHz
Line of Sight

3 GHz/3,000 MHz
Line of Sight

300 MHz
3-40 Miles

30 MHz/30,000 kHz
150-2500 Miles

3,000 kHz
100-500 Miles

300 kHz

Satellite Systems (500 MHz)
Radars (10- 30 MHz)

Channel 20 506-512   (6 MHz; 6000 kHz)
Taxi (25 kHz)

Channel 5 72-86 (6MHz;6000 kHz)
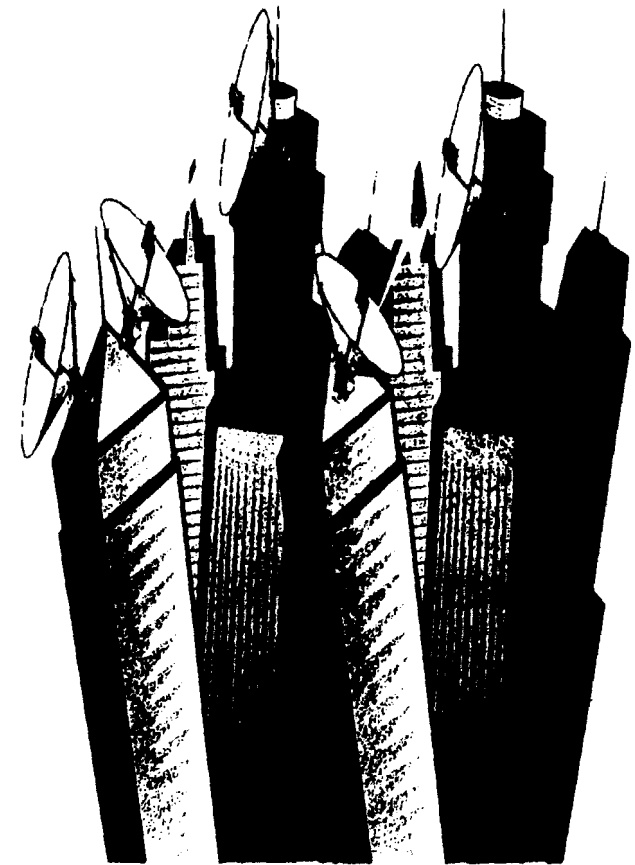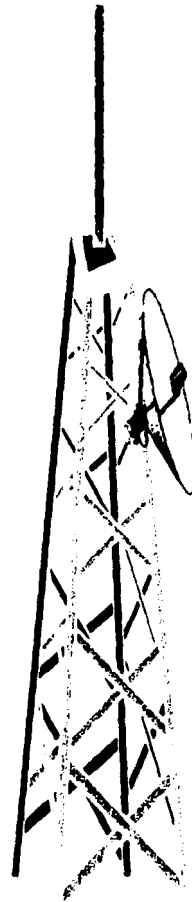Police, Fire, Ambulance Radio (20 kHz)

Citizens Band Radio (10 kHz)

Voice Radio (3kHz)

Commercial Broadcast Band (540 - 1600 kHz)

compu DAWN

Spectrum Congestion Analysis

♦ Most Existing Public Safety bands congested; Communication bands are the most cluttered.

♦ More requests in the Public Safety bands.

♦ Spectrum Congestion causes huge coordination problem.

♦ Problems are compounded by sharing within same bands.

Airwaves for Public Safety

FREQUENCY	100 hertz	10,000	1 MHz	10^2 MHz	10^4 MHz	10^6 MHz	10^8 MHz	10^{10} MHz	10^{12} MHz	10^{14} MHz	10^{16} MHz

BAND

USE   Alternating Current   AM Radio   Heat Lamps   Sun Lamps

VHF Television channels 2-6   *FM radio stations VHF Television channels 7-13*   *UHF television frequencies*

FREQUENCY	25 MHz	100	200	300	400	500	600	700	800	900

BAND

NON-FEDERAL PUBLIC SAFETY CHANNELS

25-50 MHz
Includes 315 channels for wide area coverage, mostly by state highway patrols.

156-174 MHz
The first public safety frequencies were allocated here; includes 242 channels.

220-222 MHz
10 channels recently allocated, but little suitable equipment is available.

470-512 MHz
Some unused TV channels are available.

450-470 MHz
74 Channels.

806-821 MHz and 851-866 MHz
70 Channels.

821-824 MHz and 866-869 MHz
230 Channels allocated in 1987.